## Gold King Mine ER Data Management Plan



This data management plan (DMP) is intended to provide guidance for data collection by field personnel and subsequent data management activities. The data collection and management practices presented in this plan are designed to ensure data integrity and consistency for all data collection personnel and from operational period to the next. This document is intended to be used in conjunction with the Region 8 Data Management Plan and only includes the details specific to the site.

| Site-Specific Data Management Plan |                   |                     |                  |  |  |  |
|------------------------------------|-------------------|---------------------|------------------|--|--|--|
| Project<br>Name:                   | Gold King Mine ER | TDD Number/Site ID: |                  |  |  |  |
| Author:                            | Megan Oller       | Company:            | Weston Solutions |  |  |  |
| Date<br>Initiated:                 | 8/16/2015         | Last Updated:       |                  |  |  |  |

Reviewed by: Date:

## **Data Processing**

The following table outlines the specific requirements for various data types being collected during the project.

| Data Stream <sup>1</sup>  | Site<br>Specific<br>Procedure<br>(Y/N) <sup>2</sup> | Required Information <sup>3</sup>                                | Data Source <sup>4</sup>                                      | Site Specific<br>Data Elements<br>(Y/N) | QA Process <sup>5</sup>   | Data<br>Repository <sup>6</sup> | Reporting<br>Task                           |
|---------------------------|---|--|---|---|---|---------------------------------|---|
| Water Sampling<br>Data    | Y   | Location, sample number, sample matrix, water quality parameters | iPad (if available),<br>Field logbook,<br>Water quality meter | Y                                       | Reviewed by field<br>personnel prior to<br>import into scribe   | Scribe.net                      | Results<br>Report,<br>Geospatial<br>Viewer  |
| Sediment<br>Sampling Data | Y   | Location, sample number, sample matrix                           | iPad (if available),<br>Field logbook,<br>Water quality meter | Y                                       | Reviewed by field<br>personnel prior to<br>import into scribe   | Scribe.net                      | Results<br>Report,<br>Geospatial<br>Viewer  |
| Photographic Data         | N   | Location, date, time, description                                | GPS Field Camera  | N                                       | PTL review during photo-log creation  | EPAOSC.org                      | Site photo-<br>log,<br>Geospatial<br>Viewer |
| Site Documents            | N   | SAP, HASP, Customized data presentations                         | START PTL   | N                                       | PTL and OSC<br>Reviews  | EPAOSC.org                      | NA  |
| Analytical Data           | N   | Chain of Custody, Laboratory<br>Data from ESAT mobile lab        | Scribe, Laboratory<br>EDD (in Tech Law<br>LIMS format)        | N                                       | Review by field<br>personnel prior to<br>import to ensure all<br>required fields are<br>present and data<br>maps accurately into<br>scribe database<br>(using ESAT data<br>map) | Scribe.net                      | Results<br>Report,<br>Geospatial<br>Viewer  |

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| Project Costs | N | Field Costs, Personnel Hours | Weston time track<br>reports, ODC<br>reports, burn sheets | N | PTL Review | RCMS<br>database | Weekly<br>1900 -1955<br>Forms,<br>Email to<br>OSC |
|---------------|---|------------------------------|---|---|------------|------------------|---|
|---------------|---|------------------------------|---|---|------------|------------------|---|

<sup>1:</sup> Category of data generated for projects (i.e. monitoring data, water sampling data, locational data, photographs, analytical data, costs, etc). Create one line per category.

<sup>2:</sup> Y - indicates a site specific procedure is employed, N - indicates data management follows procedures outlined in the R8 DMP

<sup>3:</sup> Information necessary to provide a complete data record
4: Equipment or source that denerates data (i.e. TVA 1000, camera, iPad, Trimble GPS, laboratory EDD)

<sup>5:</sup> QA process related to data, do not include analytical data validation here

<sup>6:</sup> Location of data storage (i.e. epaosc.org, scribe.net, geospatial viewer)

## Attachment A Site Specific Data Elements and Valid Values

Ref. Project: Gold King Mine ER TDD: Date: 8/16/15

| Data Element        | Required    | Description   | Format                   | Scribe Table.Field            | Valid Values*  |
|---------------------|-------------|---|--------------------------|-------------------------------|--|
| Location            | Yes         | Identifier for a geographic point where samples or monitoring results are collected. Must be unique within a Site.  | Text (30)                | Location.Location             | GKMSW##<br>GKMSD##<br>GKMPW##                                      |
| LocationDescription | Yes         | Brief description of a geographic point where samples or monitoring results are collected. Includes previously sampled nomenclature                       | Text (100)               | Location. LocationDescription | Example: Toe of Gold King<br>Mine Waste Dump, CC01C,<br>CC19, etc. |
| SampleID            | Yes         | Identifier for a sample that is collected. Must be unique within a Site   | Text (25)                | Samples.Samp_No               | LocationID_mmddyy  |
| Matrix              | Yes         | Matrix that is sampled.   | Valid Values             | Samples.Matrix                | Surface Water, Potable Water,<br>Sediment                          |
| SampleCollection    | Yes         | The category of sample that is collected.   | Valid Values             | Samples.SampleCollection      | Grab, Composite  |
| SampleType          | Yes         | The category of Quality Control sample that is collected in the field (if appropriate).   | Valid Values             | Samples.SampleType            | Field Sample, Blank, Duplicate                                     |
| SampleDate          | Yes         | Date when a sample is collected. If a sampling duration is involved, enter the beginning date for this activity.  | Date<br>(MM/DD/YY)       | Samples.SampleStartDate       |  |
| SampleTime          | Conditional | Time when a sample is collected. If a sampling duration is involved, enter the beginning time for this activity. Required if Sample End Time is provided. | Time<br>(24HH:MM:SS<br>) | Samples.SampleStartTime       |  |

<sup>\*</sup> Fill in additional site specific data elements/valid values if identified in the field

NOTE: This table is meant to provide detailed guidance for the collection of field data to be housed in the site scribe database. This table ensures site data is collected consistently across field teams and field events. This table exists in the Region 8 DMP with all of the default data elements and valid values. You only have to fill out this table for data elements and valid values that are specific to your site. You may copy in lines that are especially important for your site data management or specify where you only want to use a limited list of the general valid values.